DOCUMENT RESUME

ED 298 398 CG 021 079

AUTHOR Stacy, Lauri L.
TITLE The Effects of Pornography on Aggressive Behavior.
PUB DATE May 88
NOTE 37p.; Doctoral Research Paper, Biola University.
PUB TYPE Information Analyses (070) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Aggression; *Pornography; Sexuality; *Violence

ABSTRACT

This document reviews existing empirical research on the effect of pornography on aggressive behavior. Two types of pornography are distinguished: aggressive pornography and non-aggressive pornography. Conclusions drawn from the research review are presented, including: (1) aggressive pornograpy consistently increases aggressive attitudes and behaviors; (2) the effect of non-aggressive pornography is not as consistent as the effect of aggressive pornography; (3) non-aggressive pornography can have either an inhibiting or a facilitating effect on aggression due to the type of pornography used; (4) soft pornography showing sexual activity facilitates aggression; and (5) soft pornography using still photographs inhibits aggression. The review concludes that society needs to participate in evaluating and studying the effects of all mass media, including pornography; current research on pornography and on violence indicates that what individuals view does have an effect on them; better research is needed to pinpoint the effects of various kinds of pornography more precisely. (Author/ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED298398

THE EFFECTS OF PORNOGRAPHY ON AGGRESSIVE BEHAVIOR

BY

LAURI L. STACY

APPROVED:

Robert L. Langston PhD — Date 6/14/88
First Reader

James L. Hawkins PhD — Date 6-14-88
Second Reader

APPROVED:

Bruce Ramsmore, Ph.D.
Dean

6-14-88
Date

CG 021079

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Lauri L. Stacy

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

THE EFFECTS OF PORNOGRAPHY ON AGGRESSIVE BEHAVIOR

A Doctoral Research Paper

Presented to

The Faculty of the Rosemead School of Psychology

Biola University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Psychology

---

by

Lauri L. Stacy

May 1988

TABLE OF CONTENTS

	Page
INTRODUCTION.	1
HISTORY	5
EARLY RESEARCH.	7
Theoretical Explanations	9
AGGRESSIVE PORNOGRAPHY.	11
NON-AGGRESSIVE PORNOGRAPHY.	14
Methodological Issues.	14
Aggression-Facilitation Effect	16
Aggression-Inhibition Effect	17
Contradictory Models	18
SUMMARY AND CONCLUSION.	23
REFERENCES.	28

ABSTRACT

THE EFFECTS OF PORNOGRAPHY ON AGGRESSIVE BEHAVIOR

Lauri L. Stacy

The purpose of this paper is to review existing empirical research on the effect of pornography on aggressive behavior. Two types of pornography are distinguished: aggressive pornography consistently increases aggressive attitudes and behaviors. However, the effect of non-aggressive pornography is not as consistent. It is evident that non-aggressive porn can have either an inhibiting or a facilitating effect on aggression due to the type of pornography used, soft pornography or explicit pornography. In most cases, explicit pornography showing sexual activity facilitates aggression, whereas soft pornography using still photographs inhibits aggression.

The Effects of Pornography on Aggressive Behavior

There has been increased concern about rape and other forms of aggression against women and children in today's society. Violence is on the rise. The FBI estimated that 5,000 people were murdered in the United States in 1985. Also the FBI stated that one in four girls who are currently 12 years of age will be sexually assaulted sometime in her lifetime. Dr. Victor Cline, a psychologist, says that rape in the United States has increased by more than 700% since 1933 (Wildmon, 1986). The increase in violence in general and sexual violence in particular has led to a search for causes underlying the increase. Pornography is one of the possible causes that have been considered. Many writers feel that there is a link between pornography and sexual violence (Brownmiller, 1975; Burt, 1980; Donnerstein, 1980). This has led to a substantial number of investigations of a possible relationship between pornography and sexual violence.

The use of explicit sexual pictures for the purposes of entertainment or arousal is hardly a recent phenomenon. Scenes of intercourse have been found on the walls of a brothel at Pompeii, and the Roman sculptural representations of the god Priapus are very explicit. Sexually explicit descriptions and depiction have been around in one form or

another almost since the beginning of recorded history. However, not until now have we had somebody's spouse or child being raped every six minutes. Small children are being abducted from parks and playgrounds by the thousands, some being found sexually molested and murdered. Some feel that pornography is linked to this increase (Wildmon, 1986). Today pornography is no longer a mere nude in a magazine as it was in 1953, when Hugh Hefner first published Playboy magazine. Today readily available pornography includes everything from adults having sex with children or with animals to humans cutting and beating sexual partners while engaged in intercourse. There are even pornographic films where a person is actually killed during the movie's plot ("snuff" films). When we speak of available pornography today, we are talking about much more than provocative pictures of men and women.

Concern about the influence of pornography has led to the establishment of two presidential commissions on the topic, one in the late 1960's and the other in the mid-1980's. The two commissions set out to gather data about the effects of pornography and to make recommendations regarding legislative control. The general conclusion of the commission in 1970 was that there was no scientific basis to conclude that pornography has antisocial effects. However, after careful examination of research since 1970, the recent commission found that there is a possible

connection between pornography and anti-social behavior. The 1986 commission stated,

> It is clear that the conclusion of "no negative effects" advanced by the 1970 Commission is no longer tenable. This is not to say, however, that the evidence as a whole is comprehensive enough or definitive enough. While we have learned much more since 1970, even more areas remain to be explored.

The 1986 commission has not been free from criticism by other researchers. Donnerstein and Linz (1986) have pointed out that the commission members failed to make an important distinction between violence and pornography. They felt that social science research has indicated that violence, not pornography, is the single most important problem in the media today. They feel that it is violence, whether accompanied by sex or not, that has the most damaging effects upon those who view it, hear it or read about it. Although Donnerstein and Linz have made a valid point, it appears that they ignore the fact that associating violence with sex is giving the viewer a message that sex and violence go together.

It has also been felt that the 1986 commissioners lacked the credentials and experience necessary to evaluate the scientific and legal literatures relevant to the commission's broad mandate (Wilcox, 1987). Only 3 of the

commissioners had written extensively on subjects related directly or indirectly to social, behavioral, and psychological consequences of exposure to pornography. Also, Donnerstein, Linz and Penrod (1986) felt that the conclusions the commission drew were based on overgeneralizations from social psychological studies that were largely laboratory based. Furthermore, it has been noted that visual materials presented to the commissioners during the hearings were heavily skewed toward the exceptionally violent and degrading, which may have given commissioners a distorted impression of the prevalence of such materials.

Wilcox and Donnerstein et al. have made some important criticisms. However, concerning the issue of making overgeneralizations from laboratory based studies, one needs to ask if that is not the case with most research. It appears that most researchers generalize from their findings based on laboratory research, and Donnerstein is among those researchers who do precisely that.

Today there exists an abundance of research dealing with pornography and its possible effects. The existing research is broad and covers many different aspects. The major focus of this paper will be on the issue, "Does pornography facilitate or enhance aggression or deviant behavior?" There will be a quick review of the history of pornography followed by a summary of the early research

conducted before 1970. Then there will be a review of aggressive or violent pornography, where the findings appear to be consistent. Finally, the paper will focus on research involving non-aggressive pornography which includes sexually-explicit and soft pornography. This type of pornography is of concern due to its broad acceptance among the general public. Here the reader will find more inconsistencies among the findings. Theoretical models that try to explain the findings will be considered. The conclusion will grapple with the models and will raise some important questions concerning the existing research.

History

The word "pornography" comes from the Greek word "pornographos" which means the depiction of prostitutes, describing the life, manners and customs of harlots and their patrons. The term is used more generally today. According to the Oxford English Dictionary, pornography indicates "the expression or suggestion of obscene or unchaste subjects in literature or art." The terms pornography and erotica refer to many different sexually explicit stimuli. Their effects vary, depending on the specific content, the consumer, the culture, and the situation. Much of the present research involves a wide range of pornography: erotic passages, semi-nude pictures, explicit erotic films (fellatio, cunnilingus, anal intercourse), and mild erotic films (semi-nude people making love).

Even though pornography has been part of society for centuries, the pornography industry has grown considerably over the last several decades. Today it is a multi-billion dollar industry. Today five hundred fifty million dollars of this may be attributed to sales in the Los Angeles area alone. In the early 1960's, sexually explicit materials first became readily available to the public. The majority of sexually explicit material consisted of simulated sex acts with no exposed genitalia. Exposed genitalia was considered an obscenity violation in most jurisdictions. As the 1960's progressed, it became more common to see sexually explicit films showing explicit oral and genital copulation. In the 1970's, producers of sexually oriented materials began depicting various sexually explicit acts and continually tested the bounds of existing obscenity laws. More materials were designed to appeal to paraphilias, people who need unusual or bizarre imagery or acts for sexual excitement. Materials showing homosexual acts, sadomasochism, bondage, children and animals were now available to the public. Pornographic theaters and adult book stores grew in number (Wildmon, 1986).

The pornography industry has come to be a big business with large scale distributors. Now in the 1980's it is common to see numerous theater chains, home videos, Dial-a-Porn and computerized sex subscription services. It is easy to see why there is a concern over pornography and its

effects. Pornography has grown into a big business which cannot but help to play a part in our society. Due to the growth of pornography during the 1960's, researchers began to take an interest on whether pornography had any negative effects on the viewer. This interest may have also been encouraged by concerns for woman's rights and the exploitation of woman as sex objects.

Early Research

Prior to the appearance of the Presidential Commission's summary report in 1970, research regarding the behavioral effects of pornography was greatly limited and involved only selective and subjective responses (i.e., Beardslee & Fogelson, 1958; Byrne, 1961; Clark, 1952). There was research on the effects of music on fantasy responses (Beardslee & Fogelson, 1958) and investigations of authoritarianism as a factor in judging paintings to be pornographic (Stuart & Eliasberg, 1962).

The first Commission sponsored some of the earliest investigations on the effects of pornography. Over eighty studies were funded to examine various aspects of pornography. After examining their findings the commission concluded:

> In summary, empirical research designed to clarify the question has found no evidence to date that exposure to explicit sexual materials plays a significant role in the

> causation of delinquent or criminal behavior among youth or adults. The Commission cannot conclude that exposure to erotic materials is a factor in the causation of sex crimes or sex delinquency. (Commission, 1970)

The 1970 studies did not contain an investigation on the effects of violent pornography. However, this is understandable in light of the changing contents of available pornography. Since 1970, there has been an increase in sexually violent themes in the media, particularly in portrayals of sadomasochism and rape. Malamuth and Donnerstein's (1982) review concluded that the erotica most commonly available to the public in the 1960's contained less sexual violence and fewer explicit sex acts than what are found in today's X-rated movies.

Also, the 1970 commission was operating under time constraints. Most of the researchers had less than nine months to establish a research team, a setting, develop measuring instruments, gather subjects, collect data and then write their report. Therefore, there has been a need for more systematic research.

Berkowitz (1971) evaluated the findings of the 1970 Commission Report and found contradictions in some of the findings. He concluded that the research findings suggested that erotic materials may actually heighten the chances that some will carry out bizarre or deviant actions.

He also stated that the 1970 Commission demonstrated short-term effects, but did not address possible long-term effects from pornography. Berkowitz further commented that in the 1969 Presidential Commission on Violence it was concluded that the portrayal of violence in the media was a serious societal problem and should be reduced. However, the 1970 Commission on pornography stated the opposite, even though the pattern of findings was somewhat similar (short-term effects, but not long-term effects). However, most of the pornography available at this time contained no violence. Besides Berkowitz, others have criticized the findings of the 1970 Presidential Commission on Pornography (Cline, 1974; Willis, 1977), which has led to further investigations of the issues.

As a result of the commission, the rise of sex crimes and the concern it brings, the last fifteen years has produced an outpouring of relevant research. This has led to some interesting findings about the effect of some pornography on sexual arousal and aggression. In contrast to the 1970 Presidential Commission, much of the research has found a link between certain kinds of pornography and sexual violence.

Theoretical Explanations

In the past, two theoretical positions have frequently been used to explain the relationship between sexual arousal and aggressive behavior. The first is Hull's

general drive model (Hull, 1943), and the second is Freud's notion of a specific linkage between the sex drive and aggression (Freud, 1933).

According to Hullian theory, an increase in one drive should provide energy for actions that lead to the satisfaction of other drives. Psychoanalytic theory has also posited a strong relationship between sexual and aggressive drives. An increase in the sex drive will lead to an increase in aggression, and anger arousal may even stimulate sexual responding.

Recent experiments point to a greater complexity of the relationship between sex and violence than was earlier believed (Baron, 1974; Donnerstein, Donnerstein, & Evans, 1975). In the last twenty years, researchers have suggested rival explanations to the two older ones, especially concerning the effects of non-aggressive pornography.

Research over the past 15 years has included experimental results in the areas of arousal perceptions, affective states, attitudes and behavior. Two types of pornography have been distinguished to sort out differential effects in these areas, non-aggressive-porn (soft porn, nonviolent sexual acts) and aggressive porn (sadomasachism, rape scenes; Donnerstein, 1983; Malamuth & Donnerstein, 1982). In research involving sexually-aggressive pornography, the findings appear to be consistent, in that pornography does have some effect on aggression,

whereas research involving non-aggressive pornography has inconsistent findings, pornography can have either an aggression-inhibition or an aggression-facilitating effect.

Aggressive Pornography

The findings from studies investigating effects of exposure to sexually violent materials appear to be fairly consistent. Most of the research in this area measures the attitudes or behaviors of subjects exposed to aggressive pornography such as depictions of rape. It appears that considerable data indicate that exposure to aggressive pornography may alter observers' perceptions of rape and rape victims.

In two experiments (Malamuth & Check, 1980; Malamuth, Haber, & Feshbach, 1980) subjects were presented with either pornographic rape scenes in which the aggressor perceived that the assault resulted in the female victims' sexual arousal (i.e., a positive outcome) or with other depictions (i.e., a rape with victim abhorrence). Later all the subjects were given a depiction of another rape and asked to indicate their perceptions of the experiences of the victim. In comparison to other subjects, those exposed to the positive outcome version of the aggressive scene thought the rape victim in the second portrayal had suffered less.

In a field experiment, Malamuth and Check (1981) obtained strong evidence suggesting that depictions of

sexual aggression with positive consequences can affect social perceptions and attitudes. In this investigation 271 male and female students served as subjects. Some had agreed to participate in a study focusing on movie ratings. They viewed either a film portraying sexual aggression suggesting positive consequences, or a neutral feature-length movie. The dependent measures were scales assessing Acceptance of Interpersonal Violence Against Women, Rape Myth Acceptance, and beliefs in Adversarial Sexual Relations. These measures were embedded within many other items in a Sexual Attitude Survey administered to the students several days later.

Results indicated that exposure to films portraying aggressive sexuality as having positive consequences significantly increased male but not female subjects' acceptance of interpersonal violence against women and overall it increased males' acceptance of rape myths.

Other recent studies have measured behavior associated with aggressive pornography. In an experiment by Malamuth (1978), male subjects were either exposed to aggressive pornography depicting a rape of a woman by a male pirate with some suggestion of a positive outcome or to non-aggressive pornography. Following exposure to these stimuli, all subjects were insulted by a female confederate and then were placed in a situation where they could aggress against her by delivery of electric shocks. The highest level of

aggression was found in the aggressive-pornography group, suggesting the possibility that aggressive-pornographic stimuli may increase aggression against women.

Several studies have shown that exposure of male subjects to aggressive pornography were more likely to aggress against female targets rather than male targets in comparison to exposure to neutral and non-aggressive pornography stimuli (Donnerstein, 1980, 1983; Donnerstein & Berkowitz, 1981). It has been found that nonpornographic films that portrayed aggression against women were also found to increase the levels of males' aggression against female victims, although to a lesser degree than aggressive-pornographic scenes (Donnerstein, 1983).

In a study by Donnerstein & Berkowitz (1981), increased aggression against female victims following the viewing of aggressive pornography was found both with subjects who were first angered by the confederate as well as with nonangered subjects, although the increase tended to be greater for angered subjects.

From the existing research one may infer that a single exposure to aggressive pornography may promote a less sensitive attitude toward rape (Malamuth & Check, 1980) or an increased acceptance of rape myths and violence against women (Malamuth & Check, 1981). Therefore, the possibility does exist that aggression against women may well be activated by aggressive pornography.

While it seems that certain types of pornography can influence aggressive attitudes and behaviors toward women, this is not necessarily the case for non-aggressive pornography. It appears that non-aggressive pornography has varying types of effects on behavior.

Non-Aggressive Pornography

There have been a greater number of studies that have examined the effects of non-aggressive pornography than those that examine the effects of sexually violent pornography. The problems with the research in regards to non-aggressive porn is that the experimental stimuli involves two types of pornography, soft pornography and sexually explicit pornography. The use of these two stimuli in recent studies have yielded contrasting results: One group of studies found an aggression-facilitation effect for erotica, while another group found an aggression-inhibiting effect. Both groups used soft pornography in some of their studies and explicit pornography in other studies.

Methodological Issues

The existing studies differ not only on results, but also in operational definitions of erotica. Some investigators used photographs of attractive females in the nude (Baron & Bell, 1973), photographs from Playboy or sexually explicit passages, whereas others used pornographic films (Zillmann, 1971; Meyer, 1972). There is some question

as to the amount of arousal a photograph can produce compared to that of a film. The element of motion is highly salient in the depiction of sexual activities, and the greater excitatory capacity of motion pictures compared to still photographs of similar content is well documented (McConaghy, 1974; Sandford, 1974). Even photographs of explicit sexual behaviors have been shown to have only minimal effects on arousal (Zillmann & Sapolsky, 1977).

Individual differences also play an important role in this research. Evidence has suggested that there are distinct individual differences in behavioral responsiveness to erotica, but the nature of these differences have not been systematically analyzed. Fisher and Byrne (1978) found that, compared to individuals who evaluated the film as relatively nonpornographic, those who rated it as pornographic reported more restrictive sexual socialization experiences and more negative attitudes towards sex. They also responded to the film with more negative affect and showed greater increases in sexual activity subsequent to exposure.

It will become apparent that the erotic stimuli found to enhance aggressive behavior vs. those that inhibit aggressive behavior differ along a number of dimensions including content, potential to arouse, capacity to elicit positive or negative affect, and type of presentation. These qualities have made it difficult to develop a

consistent model to explain the impact of non-aggressive erotica on aggressive behavior.

Aggression-Facilitation Effect

Some research has indicated that exposure to erotic materials may facilitate subsequent aggression (Baron, 1979; Cantor, Zillman & Einsiedel, 1978; Donnerstein & Hallam, 1978; Jaffe, Malamuth, Feingold & Feshbach, 1974; Meyer, 1972; Zillman, Hoyt & Day, 1974). In a study by Donnerstein and Barrett (1978), male subjects were either angered or treated in a neutral manner by a confederate. After viewing an erotic film or a neutral film, subjects were given an opportunity either to aggress upon or to reward the confederate. Previously angered subjects showed greater aggression following the viewing of erotic films than those viewing a neutral film. Similarly, Zillman, Hoyt, and Day (1974) exposed previously provoked subjects to a neutral, aggressive, violent, or erotic film, following which all subjects viewed a neutral film and were then given the opportunity to administer electric shock to the provoking confederate. The results indicated that only the sexual stimuli significantly increased aggressiveness, even more than the aggressive film. These findings have come to be interpreted in terms of a general arousal model stating that under conditions where aggression is a dominant response, any source of emotional arousal will tend to increase aggressive behavior (Bandura, 1973; Tannenbaum,

1971). Therefore, in accordance with this model, aggressive behavior in subjects who have previously been angered has been shown to be increased by exposure to arousing sources such as aggressive or erotic films (Zillmann, 1971), physical exercise (Zillmann, Katcher & Milausky, 1972) and drugs (O'Neal & Kaufman, 1972). It would seem that, because of their arousing properties, erotic stimuli can have aggression-facilitating effects under certain conditions.

Aggression-Inhibiting Effect

Though it has been shown that erotic stimuli can have a facilitative effect, more recent investigations have pointed toward an aggression-inhibiting effect of erotic stimuli. These recent studies have indicated that provoked persons were found to aggress less against their tormentor after exposure to erotica than after exposure to neutral material (Baron, 1974, 1979; Baron & Bell, 1973, 1977; Donnerstein, Donnerstein, & Evans, 1975; Frodi, 1977; White, 1979; Zillmann & Johnson, 1973). In one study, Baron (1974) presented either neutral or erotic pictures to male subjects who had been treated in either a hostile or a neutral manner by a confederate. The results revealed that erotic exposure reduced the level of aggression by subjects initially treated in a hostile fashion.

It appears to be the type of erotica that determines whether it will have a facilitating or inhibiting effect

on aggression. In the above study and in subsequent studies with inhibiting effects (Donnerstein, Donnerstein & Evans, 1975; Baron & Bell, 1977), pictures of attractive young females in the nude lowered the intensity of aggressive reactions in provoked males, while explicit films of erotica raised the intensity of aggression in provoked males.

Contradictory Models

Due to the different findings involving non-aggressive pornography, researchers have tried to explain why there is sometimes an inhibitory and sometimes a facilitative effect of non-aggressive pornography on aggression.

Curvileanear model. Baron and Bell (1977) suggested that the differences in results and procedures point to an interesting possibility: Sexual arousal and aggression may be curvilinearly related, so that mild levels of arousal inhibit subsequent aggression, while somewhat higher levels of arousal actually enhance such behavior. This is somewhat supportive of the general arousal model cited earlier in that when the aggression arousal is dominant, any type of arousal will increase the aggressive arousal.

Attentional shift model. A study conducted by Donnerstein, Donnerstein and Evans (1975) found that pin-ups and similar pictures serve to inhibit aggression, relative to neutral pictures. They proposed a model to explain this effect. Although high sexual arousal may

facilitate aggression, stimuli that are absorbing can shift attention away from any prior anger provocation, thus allowing for the dissipation of anger arousal and a reduction of aggressive responses. This model is called the attentional-shift model. Though this model appears to be a valid explanation for the results, data reported by Fisher and Harris (1976) contradicted the attentional-shift model as well as the curvilinear model. In this study the presentation of mildly arousing erotic material following anger arousal increased aggression.

Situational restrictiveness model. Baron (1974) offered another alternative explanation. In Baron's study, after being exposed to erotica, angered subjects were led to believe that their level of sexual arousal was either low, moderate, or high and were then given an opportunity to shock their partner who had previously frustrated them. The results indicated that the moderately aroused subjects were the most aggressive, whereas the highly aroused subjects, apparently finding their level of arousal inappropriately high for the situation, inhibited their aggressive behavior. The above results can be understood in terms of situational restrictiveness: The subjects might have thought that the experimenter would have disapproved of any strong aggressiveness, so they restrained their aggressive inclinations. When nonacceptable behavior, such as sexual or aggressive responses, is the focus of the

study, the subjects might become self-conscious and experience anxiety, which most likely will lead to a suppression of these socially disapproved responses. In 1977, Frodi set out to show that erotica reduced aggression due to situational restrictiveness. From her study it appeared as though self-consciousness was induced by the anger manipulation and that the sexual arousal only intensified this self-concern. The angered and sexually aroused men delivered approximately as few and as intense shocks as the nonprovoked and sexually nonaroused men, whereas the angered and sexually nonaroused men were more aggressive than either of the above groups. The men exposed to the sexual arousal treatment rated their level of arousal as significantly less appropriate than those not sexually aroused. Therefore, feeling that their arousal level was inappropriate for this particular situation, they inhibited their aggressive responses.

Emotional incompatibility model. Dengerink (1976) proposed another explanation of the inhibition results. He suggested that since aggression toward females is generally disapproved of, fear of disapproval could act to inhibit its occurrence. This was supported by Donnerstein and Hallam (1978), who found that when previously angered male subjects were placed in a situation in which inhibitions were lowered, aggression toward a female was increased after exposure to a highly arousing erotic film.

Bandura (1973) explained that the emotional incompatibility that occurs is due to an aggression-reducing effect. According to Bandura, exposure to mild erotica, which is generally experienced as pleasurable, creates positive affective reactions that are incompatible with anger emotions. This differs from the attentional shift model in that the emotion is replaced by a competing emotion, whereas in the attentional shift model, novel stimuli can shift the person's attention away from the previous stimuli. Therefore, in the aggression-reducing effect, once an annoyed person is immersed in pleasant erotica, his anger dissipates, thus making it difficult to return to the prior state of anger. However, this argument fails to explain the aggression-enhancing effects of strong erotica.

In conclusion, from the existing research it appears that "mild" erotica (females in sexually provocative poses, semi-nude) and "strong" erotica (explicit erotica) have different effects on aggression and that their unique effects are a result of a differential involvement of established mechanisms. This led Donnerstein, Donnerstein and Evans (1975) to propose a 2-factor theory to account for the effects of erotica. The arousal factor dominates the effect of strong erotica toward a facilitation of aggression and absorption or distraction dominates the effect of mild erotica toward a reduction of aggression.

Zillmann and Sapolsky (1978) proposed that mild erotica fails to produce an appreciable degree of sexual arousal and, consequently, it is incapable of increasing emotional arousal to the point that could intensify subsequent aggressive behavior. Since general arousal of mild erotica has not been measured directly in the investigations of their effect on aggressive behavior, this possibility can not be ruled out.

Still another explanation seems warranted from the existing models. It appears that mild erotica and explicit erotica may elicit differing combinations of emotions. The emotional response to mild erotica may be pleasurable, which may compete with any aggressive emotions and thereby inhibit them, consistent with the attentional shift or the emotional incompatibility model. In contrast, strong erotica may elicit emotions related to power along with an emotion of pleasurableness. The power aspect may enhance rather than inhibit the aggressive emotions (general arousal model). The combination of power and pleasure emotions may suggest at some subliminal level that aggressiveness will be rewarded by pleasurable feelings.

According to Malamuth and Donnerstein (1982), none of the explanations above can fully account for the findings in existing research. The data point to the operation of multiple factors. It appears that elicitation and disinhibition processes of aggression are incompatible but

may even operate simultaneously. They further suggest that different processes may be more relevant to differing experimental conditions. Further research is warranted to investigate these hypotheses.

Conclusion

The effects of pornography on aggression depends largely on the type of pornography: aggressive pornography, explicit non-aggressive pornography, or soft pornography. Each type of pornography has its own typical effects.

The findings strongly suggest that aggressive pornography increases the likelihood of violence and promotes a less sensitive attitude toward rape and an increased acceptance of violence against women. These findings have been criticized by others in that it is not pornography, but violence that is the real issue. These criticisms may have some validity to them in that social scientists have identified a number of influences on human aggression. Research has demonstrated that aggression may be increased by observing a model's aggressive behavior. Therefore, if one watches violence one is more apt to aggress in real situations (Bandura, 1973). Donnerstein and Linz (1986) argued that violence against women need not occur in a pornographic or sexually explicit context to have a negative effect upon the viewer's attitudes and behavior. They feel that violent images, rather than sexual ones, are most responsible for people's attitudes

about women and rape. It appears that violent material in our society, whether sexually explicit or not, promotes violence against women. Yet, one must consider that violence paired with sexuality may give a message to the viewer that sex is a violent act, in which coercion and harm is natural. Violence may be the important factor, but when paired with sexual images it is important to evaluate the message that is brought to the viewer. When pairing violence with sexuality, the effect on sexual aggress appears to be stronger than the effect on non-sexual aggression.

Research on non-aggressive pornography directly addresses the question of whether pornography in itself can increase aggression. The answer differs according to whether the pornography is explicit or soft porn. Explicit pornography generally produces an aggression-inducing effect whereas soft or mild pornography produces an aggression-inhibiting effect. In the case of explicit pornography, it seems that when one is strongly aroused, the heightened arousal along with the possible feeling of power may enhance rather than inhibit aggressive feelings. So it may be that by an implicit message combining power and pleasure, explicit pornography may communicate that sexual aggressiveness will be rewarded by pleasure. Explicit pornography may produce the kind of intense emotional arousal that when paired with another emotional

state (i.e., anger), will increase the likelihood of acting on that other emotional state. This is consistent with Hull's theory in that an increase in one drive should provide energy for actions that lead to the satisfaction of other drives. Berkowitz (1971) concluded that any arousal-enhancing stimulus in conjunction with aggressive cues may generate impulsive aggressive behavior.

In contrast to the effects of explicit pornography, "mild or soft" pornography appears to have an aggression-inhibiting effect. The arousal from mild pornography is not as strong or intense as it is from aggressive or explicit pornography. Mild pornography is incapable of generating the level of excitatory feelings that could intensify subsequent aggressive behavior. This follows the emotional incompatibility model in that soft porn will generally produce pleasure, creating positive affective reactions that are incompatible with the anger arousal. It is important to remember that in most of the aggression-inhibiting studies, photographs were used. According to research, there is some question as to the amount of arousal a photograph can produce compared to that of a film. Therefore, it appears that photographs of nudes would create a low intensity of sexual arousal and would less likely intensify the aggressive arousal.

It appears that from the existing research that both Presidential Commissions were accurate. The 1970

Commission's findings were generally correct for soft or mild pornography, in that they stated that pornography has no inherent negative effects, whereas, the 1986 Commission is generally correct on their conclusion regarding explicit pornography and for aggressive pornography.

The literature on pornography suggests possible negative effects other than aggression. A major concern is how the role of women is affected when they are portrayed as "sex objects" and victims in pornography. Though this paper does not fully address this issue, it is important to be aware of implicit messages about women that are being related to the public.

Some have deemed pornography a moral issue and others an issue about violence, rather than sex. Because both sex-crimes and pornography (especially violent pornography) are simultaneously on the increase in our society, investigators need to consider the possibility of a connection. It may be that pornography does not increase the probability of a person to hurting another. Many people who view pornography may have good impulse control and deal with their feelings appropriately. The ones who use pornography in relation to a sex crime may be influenced by other factors that also influence their attraction to pornography. These factors may include environmental influences, personality make-up, and/or poor impulse control.

For these people pornography may be a tool for them and not necessarily a cause of their violent act. Sexual arousal is pleasant, and any other emotion paired with pleasure may enable the sex criminal to view the negative action as pleasurable too.

Society needs to participate in evaluating and studying the effects of all mass media, including pornography. Current research on pornography and on violence indicates that what we view does have an effect on us, whether it be good or bad. We need to build on this knowledge with better research to pinpoint the effects of various kinds of pornography more precisely.

References

Attorney General's Commission on Pornography (1986, July). Attorney General's Commission on Pornography: Final report. Washington, D.C. Rutledge Hill Press.

Bandura, A. (1973). Aggression: A social learning analysis. New York, NY: Prentice Hall.

Baron, R. A. (1974). The aggression-inhibiting influence of heightened sexual arousal. Journal of Personality and Social Psychology, 30, 318-332.

Baron, R. A. (1979). Heightened sexual arousal and physical aggression: An extension to females. Journal of Research in Personality, 13, 91-102.

Baron, R. A., & Bell, P. A. (1973). Effects of heightened sexual arousal on physical aggression. Proceedings of the 81st Annual Convention of the American Psychological Association, 8, 171-172.

Baron, R. A., & Bell, P. A. (1977). Sexual arousal and aggression by males: Effect of type of erotic stimuli and prior provocation. Journal of Personality and Social Psychology, 35, 79-87.

Beardslee, D. C., & Fogelson, R. (1958). Sex differences in sexual imagery aroused by musical stimulation. In J. W. Atkinson (Ed.), Motives in fantasy, action and society (pp. 132-142). New York, NY: Van Nostrand.

Berkowitz, L. (1971, December). Sex and violence: We can't have it both ways. Psychology Today, pp. 18-23.

Berkowitz, L., Lepinski, J. P., & Angulo, E. M. (1969). Awareness of own anger level and subsequent aggression. Journal of Personality and Social Psychology, 11, 293-300.

Brownmiller, S. (1975). Against our will: Men, women and rape. New York: Simon and Schuster.

Burt, M. R. (1980). Cultural myths and supports for rape. Journal of Personality and Social Psychology, 38, 217-230.

Byrne, D. (1961). Some inconsistencies in the effect of motivation arousal on humor preferences. Journal of Abnormal and Social Psychology, 62, 158-160.

Cantor, J. R., Zillmann, D., & Einsiedel, E. F. (1978). Female responses to provocation after exposure to aggressive and erotic films. Communication Research, 5, 395-411.

Clark, R. A. (1952). The projective measurement of experimentally induced levels of sexual motivation. Journal of Experimental Psychology, 44, 391-399.

Cline, V. B. (1974). Where do you draw the line? An exploration into media violence, pornography and censorship. Provo, UT: Brigham Young University Press.

Commission on Obscenity & Pornography (1970). Report of the Commission on Obscenity & Pornography. New York: Bantam.

Dengirink, H. A. (1976). Personality variables as mediators of attack-instigated aggression. In R. G. Geen & E. C. O'Neal (Eds.), Perspectives on aggression (pp. 184-108). New York & London: Academic Press.

Donnerstein, E. (1980). Aggressive erotica and violence against women. Journal of Personality and Social Psychology, 39, 269-277.

Donnerstein, E. (1983). Erotica and human aggression. In R. Geen & E. Donnerstein (Eds.), Aggression: Theoretical and empirical reviews (Vol. 2, pp. 96-105). New York: Academic Press.

Donnerstein, F., & Barrett, G. (1978). The effects of erotic stimuli on male aggression toward females. Journal of Personality and Social Psychology, 36, 180-188.

Donnerstein, E., & Berkowitz, L. (1981). Victim reactions in aggressive erotic films as a factor in violence against women. Journal of Personality and Social Psychology, 41, 710-724.

Donnerstein, E., Donnerstein, M., & Evans, R. (1975). Erotic stimuli and aggression: Facilitation or inhibition. Journal of Personality and Social Psychology, 32, 237-244.

Donnerstein, E., & Hallam, J. (1978). The facilitating effects of erotica on aggression toward females. Journal of Personality and Social Psychology, 36, 1270-1277.

Donnerstein, E., & Linz, D. G. (1986). The question of pornography. Psychology Today, 12, 56-59.

Donnerstein, E., Linz, D. G., & Penrod, S. (1987). The finding and recommendations of the Attorney General's Commission on Pornography. American Psychologist, 10, 946-953.

Fisher, W. A., & Byrne, D. (1978). Individual differences in affective, evaluative and behavioral responses to an erotic film. Journal of Applied Social Psychology, 8, 355-365.

Fisher, J. L., & Harris, M. B. (1976). Modeling, arousal and aggression. The Journal of Social Psychology, 100, 219-226.

Freud, S. (1933). New introductory lectures on psychoanalysis. New York: Norton.

Frodi, A. (1977). Sexual arousal, situational restrictiveness and aggressive behavior. Journal of Research in Personality, 11, 48-58.

Hull, C. L. (1943). Principles of behavior. New York: Appleton-Century-Crofts.

Jaffe, Y., Malamuth, N., Feingold, J., & Feshbach, S. (1974). Sexual arousal and behavioral aggression. Journal of Personality and Social Psychology, 30, 759-764.

Malamuth, N. M. (1978). Erotica, aggression and perceived appropriateness. Paper presented at the Eighty-Sixth annual convention of the American Psychological Association, Toronto, Canada.

Malamuth, N. M., & Check, J. V. P. (1980). Penile tumescence and perceptual responses to rape as a function of victim's perceived reactions. Journal of Applied Social Psychology, 10, 528-547.

Malamuth, N. M., & Check, J. V. P. (1981). The effects of mass media exposure on acceptance of violence against women: A field experiment. Journal of Research in Personality, 15, 436-446.

Malamuth, N. M., & Donnerstein, E. (1982). The effects of aggressive-erotic stimuli. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology, (Vol. 15, pp. 114-123). New York & London: Academic Press.

Malamuth, N. M., Haber, S., & Feshbach, S. (1980). Testing hypothesis regarding rape: Exposure to sexual violence, sex differences and the "normality" of rape. Journal of Research in Personality, 14, 121-137.

McConaghy, N. (1974). Penile volume responses to moving and still pictures of male and female nudes. Archives of Sexual Behavior, 3, 565-570.

Meyer, T. P. (1972). The effect of sexually arousing and violent films on aggressive behavior. Journal of Sex Research, 8, 324-331.

O'Neal, E. & Kaufman, L. (1972). The influence of attack, arousal, and information about one's arousal upon interpersonal aggression. Psychonomic Science, 26, 211-214.

Sandford, D. A. (1974). Patterns of sexual arousal in heterosexual males. Journal of Sex Research, 10, 150-155.

Stuart, I. R., & Eliasberg, W. G. (1962). Personality structures which reject the human form in art: An exploratory study of cross-cultural perceptions of the nude. Journal of Social Psychology, 57, 383-389.

Tannenbaum, P. H. (1971). Emotional arousal as a mediator of erotic communication effects. In Technical Report of The Commission on Obscenity and Pornography, (Vol. 8, Washington, D.C.: U.S. Government Printing Office.

White, L. A. (1979). Erotica and aggression: The influence of sexual arousal, positive affect, and negative affect on aggressive behavior. Journal of personality and Social Psychology, 37, 591-601.

Wilcox, B. (1987). Pornography, social science and Politics: When research and ideology collide. American Psychologist, 10, 941-943.

Wildmon, D. E. (1986). The case against pornography. Chicago, IL: Victor Books.

Wills, G. (1977, November). Measuring the impact of erotica. Psychology Today, pp. 30-34.

Zillmann, D. (1971). Excitation transfer in communication-mediated aggressive behavior. Journal of Experimental and Social Psychology, 7, 419-434.

Zillmann, D., Hoyt, J. L., & Day, K. D. (1974). Strength and duration of the effect of aggressive, violent, and erotic communications on subsequent aggressive behavior. Communication Research, 1, 286-306.

Zillmann, D., & Johnson, R. C. (1973). Motivated aggressiveness perpetuated by exposure to aggressive films and reduced by exposure to non-aggressive films. Journal of Research in Personality, 7, 261-276.

Zillmann, D., Katcher, A. H., & Milavsky, B. (1972). Excitation transfer from physical exercise to subsequent aggressive behavior. Journal of Experimental Social Psychology, 8, 247-259.

Zillmann, D., & Sapolsky, B. S. (1977). What mediates the effect of mild erotica on annoyance and hostile behavior in males? Journal of Personality and Social Psychology, 35, 587-596.